# Sustainable **Energy & Fuels**

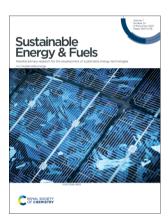
Interdisciplinary research for the development of sustainable energy technologies

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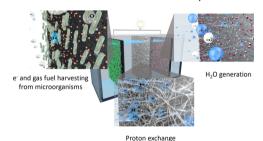
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# Nanocomposite use in MFCs: a state of the art review

Karolina Kordek-Khalil, Esra Altiok, Anna Salvian, Anna Siekierka, Rafael Torres-Mendieta, Claudio Avignone-Rossa, Andrea Pietrelli, Siddharth Gadkari, Ioannis A. Ieropoulos\* and Fatma Yalcinkaya\*

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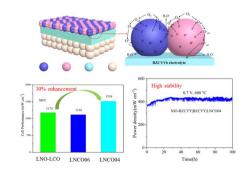


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Mingming Zhang, Xiangbo Deng, Hua Tong and Zetian Tao\*



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UiO-66(-NH<sub>2</sub>) crystal-decorated Cu<sub>7</sub>S<sub>4</sub> snowflakelike nanoarchitectures with synergistic charge migration for enhanced photocatalytic H2 evolution and N<sub>2</sub> fixation

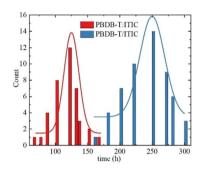
Ranjit Bariki,\* Aditya Ranjan Pati, Sibun Kumar Pradhan, Saumyaranjan Panda, Swagat Kumar Nayak and B. G. Mishra\*



#### 5648

## Promoting the stability of organic photovoltaics by planar heterojunction optimization

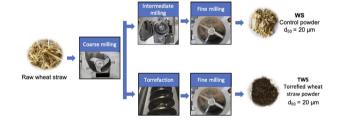
Weixia Lan, Xiaohui Gao, Xian Wu, Qiqi Ding, Wei Shi, Yingjie Liao, Yuanyuan Liu, Wing Chung Tsoi\* and Bin Wei\*



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# Fine comminution of torrefied wheat straw for energy applications: properties of the powder and energy balances of the production route

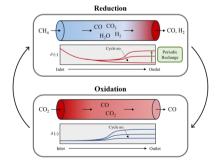
Rova-Karine Rajaonarivony, Xavier Rouau, Jean-Michel Commandré, Charlène Fabre, Jean-Eudes Maigret, Xavier Falourd, Sophie Le Gall, Bruno Piriou, Camille Goudenhooft, Sylvie Durand, Alain Bourmaud, Johnny Beaugrand and Claire Mayer-Laigle



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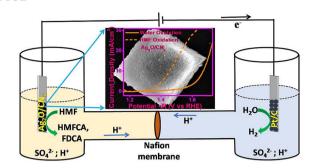
# Enhanced syngas selectivity and carbon utilization during chemical looping reforming of methane via a non-steady redox cycling strategy

Caroline M. Hill, Simon Ackermann, Kathryn G. Trimm, Dylan C. McCord, Philipp Furler and Jonathan R. Scheffe\*



### **PAPERS**

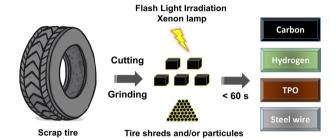
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MOF-derived interface-rich silver/silver oxide nanostructures as an effective electrocatalyst for oxidation of 5-hydroxymethylfurfural to 2,5furandicarboxylic acid (FDCA) with spontaneous FDCA separation in acid media

Rajib Samanta, Debashish Paik, Manjunatha Kempasiddaiah, Sonali Panigrahy and Sudip Barman\*

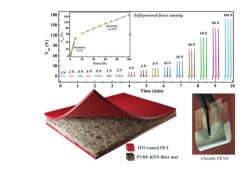
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# Hydrogen production by waste tire recycling by photo-pyrolysis

Wanderson O. Silva,\* Bhawna Nagar, Dennis Ellersiek, Luc Bondaz, Jordi Espín, Mathieu Soutrenon and Hubert H. Girault

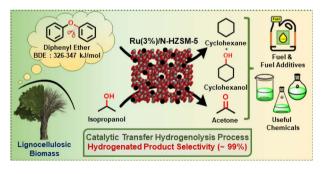
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An electrospun PVDF-KNN nanofiber based lead-free piezoelectric nanogenerator for mechanical energy scavenging and self-powered force sensing applications

B. S. Athira, Kuzhichalil Peethambharan Surendran\* and Achu Chandran\*

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Selective C-O bond cleavage in diphenyl ether via catalytic transfer hydrogenolysis over Ru-decorated nanocrystalline H-ZSM-5

Atul Kumar and Rajendra Srivastava\*

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# Expression of concern: Optimization of a compact layer of TiO<sub>2</sub> via atomic-layer deposition for highperformance perovskite solar cells

Ahmed Esmail Shalan, Sudhakar Narra, Tomoya Oshikiri, Kosei Ueno, Xu Shi, Hui-Ping Wu, Mahmoud M. Elshanawany, Eric Wei-Guang Diau\* and Hiroaki Misawa\*